

providing an adhesive applicator comprising at least one reservoir to store said adhesive, a dispensing actuator in communication with said at least one reservoir, and a suction actuator in communication with a suction source;

actuating said suction actuator to controllably apply suction to said work surface;

actuating said dispensing actuator to apply a dispensing pressure to said at least one reservoir;

effecting an adhesive flow;

applying said adhesive flow to said work surface;

releasing said dispensing actuator to terminate the application of said dispensing pressure to said at least one reservoir;

terminating said adhesive flow; and

actuating said suction actuator to controllably apply suction to said work surface to remove residual adhesive from said work surface.

²³ 24. (New) The method of claim ²²23 further comprises:

providing an applicator having at least two reservoirs containing at least two adhesive components;

applying an equal dispensing pressure to each of said at least two reservoirs;

effecting a flow of at least two adhesive components; and

mixing said at least two components to form a multiple component material within said applicator.

²⁴ 25. (New) The method of claim ²³24 wherein said applicator further comprises a mixing tip in communication with each of said at least two reservoirs and said dispensing actuator.

²⁵ 26. (New) The method of claim ²²23 further comprising applying said dispensing pressure at discrete intervals.

²⁶ 27. (New) The method of claim ²²23 wherein said adhesive is a fibrinogen tissue adhesive.

²⁷ 28. (New) The method of claim ²⁴23 wherein said work surface comprises a mammalian tissue.

29. (New) A method of applying a multiple component adhesive to a work surface, comprising:

providing an adhesive applicator comprising at least two reservoirs to separately store said adhesive components, a dispensing actuator in communication with said at least two reservoirs, a suction actuator in communication with a suction source, and a mixing tip in communication with said at least two reservoirs;

actuating said dispensing actuator to apply a dispensing pressure to said at least two reservoirs;

effecting a flow of each of said adhesive components;

mixing said adhesive components to form a mixed adhesive;

applying said mixed adhesive to said work surface;

releasing said dispensing actuator to terminate the application of said dispensing pressure to said at least two reservoirs;

terminating said flow of each of said adhesive components; and

actuating said suction actuator to controllably apply suction to said work surface to remove residual mixed adhesive from said work surface.

30. (New) The method of claim ²⁹ wherein said mixing further comprises:

providing a mixing head comprising a dispensing tip in communication with a mixing channel, said mixing channel in communication with at least two channels in communication with said at least two reservoirs;

receiving each of said adhesive components from said at least two channels in said mixing channel;

mixing said adhesive components to within said mixing channel; and

applying said mixed adhesive from said dispensing tip to said work surface.

³⁰ 31. (New) The method of claim ³⁰ further comprising providing a suction channel in communication with said suction source.

³¹ 32. (New) The method of claim ³¹ further comprising positioning said suction channel proximate to said dispensing tip.

³² 33. (New) The method of claim ³² further comprising applying said dispensing pressure at discreet intervals.

33/34. (New) The method of claim ²⁸29 wherein said adhesive is a fibrinogen tissue adhesive.

34/35. (New) The method of claim ²⁸29 wherein said work surface comprises a mammalian tissue.

35/36. (New) The method of applying multiple component fibrinogen tissue adhesive to a work surface, comprising:

providing an adhesive applicator comprising:

- a) at least two reservoirs to separately store adhesive components;
- b) a dispensing actuator in communication with said at least two reservoirs;
- c) a suction actuator in communication with a suction source; and
- d) a mixing head in communication with said at least two reservoirs, said mixing head having a dispensing tip in communication with a mixing channel, said mixing channel in communication with at least two channels, said at least two channels in communication with said at least two reservoirs, and a suction channel in communication with said suction source;

actuating said dispensing actuator to apply a dispensing pressure to said at least two reservoirs;

effecting a flow of each of said adhesive components within said at least two channels;

receiving within said mixing channel said flow of said adhesive components from said at least two channels;

mixing said adhesive components within said mixing channel to form a mixed adhesive;

applying said mixed adhesive from said dispensing tip to said work surface;

releasing said dispensing actuator to terminate the application of said dispensing pressure to said at least two reservoirs;

terminating said flow of each of said adhesive components within said at least two channels; and